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ABSTRACT

This publication is a teacher's guide for developing a curriculum in environmental education. It contains a variety of informational sources to aid teachers in developing their own programs. Information includes additional sources on the subjects of curriculum planning and development and environmental education, as well as suggested curriculum guidelines and a table of contents. Included is a section of selected sources of instructional materials that include the titles and prices of most of the materials and the addresses for ordering them. (MA)

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DEVELOPING ENVIRONMENTAL EDUCATION CURRICULUM MATERIAL

TENNESSEE VALLEY AUTHORITY

SE 019 197

Prepared by

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Knoxville, Tennessee 37902

August 1974

DEVELOPING ENVIRONMENTAL EDUCATION CURRICULUM MATERIAL

This paper deals very briefly with curriculum–developing subject or course material–on environmental education for students. It has been prepared to serve as a general guide to the teacher.

State departments of education have "rules and regulations" or a "course of study" for local school systems or districts to follow when designing curricula. Rules and regulations address minimum standards for all facets of education, e.g., curriculum, finance, etc. Local systems have considerable flexibility in programming as long as they stay within the legally accepted guidelines of the state. These guidelines should be reviewed carefully as the first step in program development.

Even though all teachers are familiar with the basics of curriculum planning and development, some may want to review selected material on the subject; therefore, a few books are listed in the bibliography.

A second step in developing environmental education curriculum material would be to review the literature to see what now exists. This can be done by looking under the subject area "curriculum," "environmental education," or "conservation education" in *Education Index* and *Books In Print. Education Index* is published by:

H. W. Wilson Company
950 University Avenue
Bronx, NY 10452

Books In Print is published by:

R. R. Bowker Company
1180 Avenue of the Americas
New York, NY 10036

Both of these publications are found in major libraries. Additional material is available through the Educational Resources Information Center (ERIC) at:

Educational Resources Information Center (ERIC)
The Ohio State University
400 Lincoln Tower
Columbus, OH 43210

ERIC maintains an excellent collection of environmental education documents on programs funded by HEW and other agencies. Many of the programs of interest will be those funded by HEW under Title III and the Environmental Education Act of 1970. Specific information on these programs may also be obtained by writing HEW direct at:

Commissioner
Office of Education
Department of Health, Education, and Welfare
400 Maryland Avenue, SW.
Washington, DC 20202

(This paper contains recycled fibers)

Suggested sources of environmental education curriculum material are given in the bibliography. Most of these documents are inexpensive or free, and some should be reviewed before preparing new material. Some documents may have local application with only minor changes. Others may be used as enrichment material without making any changes to their contents.

If it is desirable to develop material tailored to fit local needs and resources, this can be easily done by organizing a curriculum writing committee. The committee should include students, teachers representing the various academic disciplines, parents, and community resource people. If money is available, it may be desirable to also employ a consultant. Directors of model programs in the country are available for this. Their names, addresses, and telephone numbers can be obtained during the literature review or from:

> Disinger, John F., and Beverly Lee. *A Directory of Projects and Programs in Environmental Education for Elementary and Secondary Schools*, 2nd ed. 1973.
> Educational Resources Information Center (ERIC)
> The Ohio State University
> 400 Lincoln Tower
> Columbus, OH 43210

In addition, HEW's Division of Technology and Environmental Education can provide a listing (project titles, names of project directors, addresses, and telephone numbers) of relevant projects funded under the Environmental Education Act of 1970. You may contact:

> Director
> Division of Technology and Environmental Education
> Department of Health, Education, and Welfare
> 400 Maryland Avenue, SW.
> Washington, DC 20202

Before developing any specific curriculum material, it will be helpful to review the suggested guidelines in appendix A.

An outline depicting some of the topics which should be considered in a comprehensive curriculum guide is given in appendix B.

APPENDIX A

SUGGESTED GUIDELINES FOR DEVELOPING ENVIRONMENTAL EDUCATION CURRICULUM OR ENRICHMENT MATERIAL

1. In order to capitalize on past fiscal investments and experiences, materials on existing curricula should be reviewed and utilized when applicable to prevent duplication of efforts and "reinventing the wheel."

2. The laws of nature should be incorporated in the school curriculum at every grade level.

3. Program models for process, content, organization, and presentation should be developed and field tested for both formal and informal education.

4. Special materials should be developed addressing what should be taught about natural laws, cycles or processes, ecological principles, resource utilization, and environmental problems in all disciplines in the curriculum.

5. Educational materials should stress the interrelatedness of environmental problems and include consideration of social, political, and economic implications in formulating solutions to problems.

6. Choice-consequence relationships in decision making should be considered in developing curriculum material.

7. Material should be revised or updated continuously addressing environmental topics of immediate concern at various geographic levels—neighborhood, community, town, county, state, region, nation, and world—as students progress through grades.

8. Full use should be made of community resources (human and physical) in order to make education for students more relevant to real-life situations.

9. Opportunities and experiences for understanding the basic social processes man has developed in the past, for the present, and the future to satisfy his basic needs should be considered very important aspects in curriculum development.

10. Curriculum development should include emphasis on desirable and undesirable individual and group behaviors as related to resource utilization, maintaining balance in natural systems, and survival.

11. Students should be involved in planning their own programs and their needs and interests considered in developing curriculum material.

12. The ultimate goal of curriculum (education, in general) should be to prepare a well-rounded citizen, one who possesses skills and attitudes which foster the use of knowledge for the common good of the people, understands change processes and planned change, and participates actively in shaping society.

APPENDIX B

A PROPOSED TABLE OF CONTENTS FOR DEVELOPING A CURRICULUM OR TEACHING AND RESOURCE GUIDE FOR ENVIRONMENTAL EDUCATION

(Kindergarten through Grade 12)

SECTION I

Foreword

Environmental Education
- Philosophy and Need
- Definition and Importance

Nonrenewable Resources

Renewable Resources

SECTION II

Resource People

State Department of Education, Soil Conservation Service, Game and Fish Commission, Environmental Protection Agency, National Park Service, Forest Service, Tennessee Valley Authority, etc.

Resource Facilities

Describe places, locations, and purposes of field trip. Places will vary according to availability of resource facilities near each school system. Some examples of places to visit are:

- Airport
- Aquarium
- Arboretum
- Camp
- Cave
- Christmas tree farm
- City water supply plant
- Coal mine
- Composting plant
- Conservation education center
- Convalescent home
- Dam
- Dog pound
- Electrical generating plant
- Environmental education center
- Fair
- Farm
- Fire tower
- Fish hatchery
- Fur farm
- Game farm
- Gasoline refinery
- Ghetto
- Greenhouse
- Grist mill
- Hospital
- Iron and steel plant
- Junkyard
- Lake
- Maple sugar camp
- Marsh
- Meadow
- Museum
- National forest
- Nature center
- Nature preserve
- Open dump
- Outdoor school site

Park
Planetarium
Pond
Railroad yard
Recycling plant
Road cut (fossils)
Rock quarry
Sanitary landfill
Sewage disposal plant
Shopping center
Stream
Strip mine
Subdivision development
Superhighway construction
Supermarket
Swamp
Tree nursery
Truck garden
Vocational-Technical school
Water power plant (hydroelectric)
Weather station
Well-managed watershed
Zoo

SECTION III

Field Trip Excursion Procedures
- Appointments
- Cancellations
- Transportation
- Permission for Excursion
- First Aid Kit

SECTION IV

Potential Topics of Interest*
- AIR
- ANIMALS
- ENERGY
- HUMAN RESOURCES
- LAND USE
- MINERALS
- NOISE
- PLANTS
- POPULATION
- SOILS
- TRANSPORTATION
- WASTE DISPOSAL
- WATER

Background information should be provided on these potential topics of interest and related to all disciplines within the curriculum. Concept statements and student activities (pretrip, trip, posttrip) should be described. Material should be prepared by grade levels. Teaching outlines may also be included for each potential topic of interest.

SECTION V

Suggested Environmental Improvement Projects or Activities for Students (individuals and groups) (All grade levels can be included.)

Special Programs and Research Projects for Students (individuals and groups) (All grade levels can be included.)

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*It might be more appropriate to develop a separate guide on each of these topics of interest.

SECTION VI

Readings and Audio-Visual Aids
Students
Teachers

Free and Inexpensive Materials

SECTION VII

Getting the Most Out of the Field Trip
Equipment To Take Along on the Field Trip

SECTION VIII

Evaluating the Environmental Education Program

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Beauchamp, George A. *Curriculum Theory*, 2nd ed. 1968. The Kagg Press, Box 264, Wilmette, IL 60091.

Blitz, Barbara. *The Open Classroom: Making It Work*. 1973. Allyn & Bacon, Inc., 470 Atlantic Ave., Boston, MA 02210. (paper text ed. $3.95)

Eisner, Elliott W., ed. *Confronting Curriculum Reform*. 1971. Little, Brown & Company, 34 Beacon St., Boston, MA 02106. ($7.95)

Goodlad, John I., and Harold G. Shane, eds. *The Elementary School in the United States*. (72nd Yearbook, National Society for the Study of Education, Part 2). 1973. University of Chicago Press, 5801 Ellis Ave., Chicago, IL 60637.

Haff, Glen, Joseph Bondi, and John Wiles. *Curriculum Planning–A New Approach*. 1974. Allyn & Bacon, Inc., 470 Atlantic Ave., Boston, MA 02210.

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Saylor, J. Galen, and William M. Alexander. *Planning Curriculum For Modern Schools*. 1966. Holt, Rinehart & Winston, Inc., 383 Madison Ave., New York, NY 10017. ($12.00)

Sund, Robert B., and Leslie W. Trowbridge. *Teaching Science by Inquiry in the Secondary School*. 1973. Charles E. Merrill Publishing Co., Div. of Bell & Howell Co., 1300 Alum Creek Dr., Columbus, OH 43216. ($9.95)

Taylor, Peter, and Doris M. Cowley, eds. *Readings in Curriculum Evaluation*. 1974. William C. Brown and Co., 2460 Kerper Blvd., Dubuque, IA 52001. (paper text ed. $4.95)

Trump, J. Lloyd, and Delmas F. Miller. *Secondary School Curriculum Improvement*. 1974. Allyn & Bacon, Inc., 470 Atlantic Ave., Boston, MA 02210.

Unruh, Glenys G., and William M. Alexander. *Innovations in Secondary Education*. 1970. Holt, Rinehart & Winston, Inc., 383 Madison Ave., New York, NY 10017. (paper text ed. $5.25)

Van Till, William, Gordon S. Vars, and John H. Lounsbury. *Modern Education for the Junior High School Years*. 1961. Bobbs-Merrill Co., 4 West 58th St., New York, NY 10019.

Selected Sources of Environmental Education Instructional Material

Air Pollution Control Association
211 South Dithridge Street
Pittsburgh, PA 15213

Air Pollution Experiments for Junior and Senior High School Science Classes, 2nd ed., Donald C. Hunter and Henry C. Wohlers, eds., 1972. ($1.50)

Alabama Department of Education
Division of Vocational Education
and Community Colleges
Home Economics Education
Montgomery, AL 36104

Suggestions for Teaching Energy Conservation in Home Economics.

Allegany County Board of Education
108 Washington Street
Cumberland, MD 21502

Allegany County Outdoor School, 1970.

A Guide for the Allegany County Outdoor School, 1974. Sixth Grade.

Vespers Tips–Allegany County Outdoor School, 1971.

Applachian Regional Commission
1666 Connecticut Avenue, NW
Washington, DC 20235

Environmental Issues for Appalachian Youth, March 1970, (presents the issues and suggests what to do to help).

Arizona Department of Education
1535 West Jefferson Street
Phoenix, AZ 85007

Elementary Teachers Resource Guide for Environmental Education, 1973.

Environmental Education Resource Catalog, prepared by Project OUTREACH, Phoenix Union High School System and Phoenix Area Elementary School Districts.

Environmental Education: Teaching Environmental Pollution, Grades 4-6, prepared by Project OUTREACH, Phoenix Union High School System.

My Energy is Your Energy, 1974 (elementary energy guide).

Student Action For The Valley Environment (SAVE), prepared by Project OUTREACH, Phoenix Union High School System.

Associated General Contractors of Massachusetts, Inc.
220 Boylston Street
Chestnut Hill, MA 02167

Environment Guide for Construction ($5.00).

Atlanta Public Schools
Environmental Education Project
771 Lindbergh Drive, NE.
Atlanta, GA 30324

Student Guide for Environmental Education Program, 1973, ($1.00).

Bellevue Public Schools
Project USE (Urban-Suburban Environmental Education)
310 102nd Avenue, NE.
Bellevue, WA 98004

Curriculum Outline: Energy and Man's Environment, Sixth Grade, 1973.

Project USE Program, Part II, 1974 (urban-suburban intercultural environmental education program, grades 5 and 6).

Benziger, Bruce, and Glencoe, Inc.
Web of Life Information
866 Third Avenue
New York, NY 10022

Ten books in "Web of Life" Series by George McCue, 1971. ($1.60 ea.; Teacher's Guides $0.40 ea.)

Ecology
Ecology: The City
Ecology: The Deserts and Man
Ecology: The Farm
Ecology: The Forests and Man
Ecology: The Freshwaters and Man
Ecology: The Grasslands and Man

Ecology: The Mountains and Man
Ecology: The Oceans and Man
Ecology: The Suburbs

(Teacher's Guides are available for these texts.)

Board of Cooperative Educational Services of
Northern Westchester and Putnam Counties
Project ECOS
Building 8, 845 Fox Meadow Road
Yorktown Heights, NY 10598

Environment - A Humanistic Approach (6th grade)
Environmental Education - Three High School English Electives
Environmental Studies - Air - Land - Water (middle school)
Historical and Ecological Study of a River (middle school)
Local Environmental Study (high school)
A Multidisciplinary Environmental Curriculum (7th grade)
Sense Awareness through Environment (all grades)

Brevard County Schools
Center for Environmental Learning
705 Avocado Avenue
Cocoa, FL 32922

Consumer Resources Idea Handbook
Human Implications of a Threatened Environment
Teachers Curriculum Guide for Field Ecology
Teachers Environmental Resource Unit: The Automobile
Teachers Environmental Resource Unit: Energy and Power
Teachers Environmental Resource Unit: Industry: Iron/Steel and Pulp/Paper

California State Department of Education
721 Capitol Mall
Sacramento, CA 95814

Ekistics, a guide for the development of an interdisciplinary environmental education curriculum, 1973.

Guide to Conservation Education: Films, Filmstrips, and Picture Sets, 1972. Listings of audio-visual materials for use in conservation education programs, grades K-12.

Handbook on California's Natural Resources, Vol. I, 1972, (educational aspects); Vol. II, 1970 (source book of basic information)

California State Department of Public Health
2151 Berkeley Way
Berkeley, CA 94704

Experiments for the Science Classroom (based on air pollution problems), revised 1962.

Cameron Public Schools
Cameron, WI 54822

Environmental Ecological Education (a guide for environmental education in elementary schools)

Carteret County Public Schools
Regional Marine Science Project
Beaufort, NC 28516

Creating Effective Field Experiences for Coastal Schools
Dune Detective
The Field Approach to Coastal Ecology - teacher's supplement
Salt Marsh, Sound and Sea Beach
The Sea and its Boundaries - teacher unit
The Sea and Modern Man
A Second Grade Tour of Mudflat Town - teacher supplement
Treasure Hunt: Life of the Sound

The Center for Curriculum Design
823 Foster Street
Evanston, IL 60204

You Are An Environment: Teaching/Learning Environmental Attitudes, by Noel McInnis, 1972. (a book for educators at all levels; of particular value for preservice teacher training) ($2.00)

Central Greene School District
Project LIFE (Living Instruction For Ecology)
Waynesburg, PA 15370

Living Instruction For Ecology
Our Playground (and yours)
Outdoor Lab Stuff

Central Washington State College
Ellensburg, WA 98926

Man's Environment–How It May Be Improved, 1971. (Contains units on mining, grasslands, farming, forests, atomic energy, urban environmental education, and water.)

Citizens' Advisory Committee on Environmental Quality
1700 Pennsylvania Avenue, NW.
Washington, DC 20006

Citizen Action Guide to Energy Conservation, 1973. $1.75. Available from:
Superintendent of Documents
U.S. Government Printing Office
Washington, DC 20402
(Stock No. 4000-00300)

Citizens Make The Difference, January 1973, (seven case studies depicting citizen action) $1.75 for domestic postpaid; $1.50 in bookstores of the U.S. Government Printing Office.

Colorado State Department of Education
Office of Instructional Services
Division of Elementary and Secondary Education
Denver, CO 80203

Curriculum Guide in Conservation Education (grades K-9), prepared by Eugene H. Herrington and Larry Robbins, 1964.

Cooperative Science Education Center
156 Adams Lane
Oak Ridge, TN 37830

Teacher's Guide for Litter, "A Nation of Spoilers"

Council on Environmental Quality
722 Jackson Place
Washington, DC 20006

Energy and the Environment/Electric Power, August 1973, $0.85.
Available from: U.S. Government Printing Office
Washington, DC 20402

Craig County Public Schools
Environmental CARE Project
Post Office Box 245
New Castle, VA 24127

Trail Guides and Nature Study, Camp Mitchell

Delaware-Raritan Tuberculosis and
Respiratory Disease Association, Inc.
693 Alexander Road
Princeton, NJ 08540

Environmental Education Resource Guide - Books I and II (a resource guide for elementary, secondary, and college levels)

Denver Public Schools
Materials Control
414 Fourteenth Street
Denver, CO 80202

Denver Urban Environmental Studies for Grades K-6 (a guide to studies of total environment)

DeSoto Middle School
Post Office Box 820
Arcadia, FL 33821

Environmental Learning Laboratory Packets (include animal ecology, fossils, live oak hammock, pioneer-cleared area, ecotone, wet lowland area, etc.)

DILENOWISCO Educational Cooperative
Norton, VA 24273

Awareness of Our Environment

Education/Research Systems, Inc.
2121 Fifth Avenue
Seattle, WA 98121

Energy and Man's Environment, Thomas F. Ris, ed. 1973. (an interdisciplinary guide containing activities for grades K-12 for the study of energy) ($2.95)

Educational Facilities Laboratories, Inc.
477 Madison Avenue
New York, NY 10022

City to Country -Outdoor Education for New York City/A Feasibility Study, by Eugene M. Ezersky, 1969.

Educational Methods, Inc.
500 North Dearborn Street
Chicago, IL 60610

Jelly Jam, the People Preserver, by Judi Friedman. (an environmental education reading activity book, teacher's manual, and posters)

Educational Resources Information Center (ERIC)
400 Lincoln Tower
The Ohio State University
Columbus, OH 43210

A Directory of Projects and Programs in Environmental Education for Elementary and Secondary Schools, 2nd ed., by John F. Disinger and Beverly Lee, 1973.

Environmental and Outdoor Education
Materials Company
Dowling, MI 49050

Environmental and Outdoor Education Materials Catalog

Environmental Education Center
13 Veterans Drive
Oteen, NC 28805

Air Pollution (a slide-script materials packet)
America Runs on Electricity - The Energy Crisis, grades 5-9
Art Is A Way of Living
City Planning
DDT and the Food Chain
Developing On-Site Nature Trails
Earth Bound: Communications in Environmental Education
Encounters in my Environment
Flower Power - An Introduction to Wildflowers (a slide-script presentation)
The Grocery Bag as a Pollution Package (a slide-script presentation)
The History of Population Growth
Land Use
Methods in Teaching Environmental Education
The Nature of Language - Creative Writing
Noise Pollution
On-Site Environmental Science Guide
On-Site Environmental Social Studies Guide
A Resource Bibliography
Solid Waste - Everyman's Pollutant (a transparency program)
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Thermal Pollution (a slide-script presentation)
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625 Orange Street, No. 38
New Haven, CT 06511

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An Introduction to Population, Environment, and Society, by Lawrence M. Schaefer, 1972. (teacher's resource manual)

J. G. Ferguson Publishing Company
6 North Michigan Avenue
Chicago, IL 60602

Series of eight curriculum guides developed from the Conservation Curriculum Improvement Project, South Carolina Department of Education, Columbia, SC 29201 ($27.20 per set; $3.95 single copy)

People and Their Environment–Teachers' Curriculum Guide to Conservation Education–
Grades 1 - 2 - 3
Grades 4 - 5 - 6
Biology
Home Economics
Outdoor Laboratory
Science, Grades 7 - 8 - 9
Social Studies, Grades 7 - 8 - 9
Social Studies, Grades 10 - 11 - 12

Florida Department of Education
Bureau of Environmental Education
Miles Johnson Building
Tallahassee, FL 32304

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University of Maryland
College Park, MD 20742

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Glassboro, NJ 08028

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High Rock Park Conservation Center
Nevada Avenue
Staten Island, NY 10306

Man and His Environment

Huntington Beach Union School District
1902 Seventeenth Street
Huntington Beach, CA 92648

Urban Wild: A Manual for the Development, Implementation, and Operation of Nature Centers on School Campuses, by James L. Oritz.

Huntsville City Board of Education
Adult Education Program
Huntsville, AL 35807

Materials Guide For Adult Basic Education, 1974.

Illinois Superintendent of Public Instruction
325 South Fifth Street
Springfield, IL 62706

Dictionary of Conservation Terms
Guidelines for Conservation Study in Illinois Schools
Outdoor Activities in Conservation Study
Teaching Conservation

Indiana State Department of Public Instruction
Division of Curriculum
Tenth Floor, Blue Cross Building
120 West Market Street
Indianapolis, IN 46204

Total Environment Education (contains guidelines for the development of an environmental education program, instructional objectives for grade levels K-12 and all curriculum areas, and a listing of curriculum resources)

Indianapolis Public Schools
Division of Curriculum and Supervision
Education Center
120 East Walnut
Indianapolis, IN 46204

Outdoor Education Handbook
Outdoor Education: Some Suggestions Useful in Planning

Institute for Environmental Education
8911 Euclid Avenue
Cleveland Heights, OH 44106

A Curriculum Activities Guide to In-Depth Environmental Studies
A Curriculum Activities Guide to Population and Environmental Studies
A Curriculum Activities Guide to Solid Waste and Environmental Studies
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(Guides produced by Project KARE, Blue Bell, PA 19422)

The Interlakes Environmental and Outdoor Education Program
Chester, SD 57016

Curriculum materials available include a variety of topics for grades K-12.

The Interstate Printers and Publishers, Inc.
19-27 North Jackson Street
Danville, IL 61832

Self-Earth Ethic (SEE) (A series of life-centered curriculum guides for environmental education, K-12.) By John W. Hart and Jessie M. Turner.

Iowa State Department of Public Instruction
Grimes State Office Building
Des Moines, IA 50319

Energy Materials, elementary and secondary levels.

P. S. Jones Junior High School
Environmental Science Study Curriculum
Washington, NC 27889

The Conservation of North Carolina's Resources
Ecological Investigations
Environmental Science Study Curriculum - Teacher's Handbook
Land Abuse - Quality Control
Learning To Make Environmental Decisions
Man and His Environment
Water Quality Control

Kemmerer School District No. One
Kemmerer, WY 83101

A Teacher's Guide to KOLab, 1970. (teacher's science-unit guide book, Kemmerer Outdoor Laboratory)

Kingsport City Schools
Kingsport, TN 37664

Investigations for a Mobile Environmental Education Laboratory, 1972
Mobile Environmental Education Laboratory
Mobile Environmental Education Laboratory Project, Final Report, 1973.
Science Curriculum Guide (K-9), 1970.

Lee County Schools
Environmental Education Center
2266 Second Street
Fort Myers, FL 33901

Beaches in Motion/Interaction and Environmental Change
Downtown/A City in Change
Environmental Concept Unit for the Middle School
Environmental Education Interdisciplinary Concepts and Activities (separate guides available for grades 1-8)
Field Studies Planning Guide
Interdisciplinary Environmental Education Units (separate units available for social studies, language arts, science, and math)
Little Johnny Raindrop (a poem on the water cycle with both student booklet and teacher's guide)
Mud Flat Guide/Producers/Consumers/Decomposers
On Campus Teaching: Activity Guide–Environmental Education, 1974.
Semi-Programmed Approach to Field Teaching: Procedures and Techniques for Writing
Succession/Beauty in Change
Trees–"Things of Value"
What Is a Tree Worth to You?/Urban Forestry
Who's Who on the Beach?
Why is a Beach a Beach?

Lees Junior College
Jackson, KY 41825

The New Curriculum–"Man and His Total Environment: Focus on Southern Appalachia," 1971.

Maine Environmental Education Project
Intermediate School
Yarmouth, ME 04096

The Community Environmental Inventory, prepared by Dean B. Bennett and Richard MacGown, 1971.

The Environmental Education Committee, prepared by Dean B. Bennett and Richard MacGown, 1972.

Environmental Education Program–Organization and Operation, prepared by Dean B. Bennett and Wesley H. Willink, 1972.

Environmental Education Teaching Guide, Grade 6, prepared by Dean B. Bennett.

Handbook–Preservice-Inservice Teacher Environmental Education Program (K-12)

The School Site in Environmental Education (excellent material to aid development of an environmental education program)

Marion Community Schools
Marion, IN 46952

Teacher-Student Activity Guide, interdisciplinary, community-oriented environmental education program for all grade levels.

Martin County Schools
Environmental Studies Center
205 South Indian River Drive
Jensen Beach, FL 33457

Environmental Studies Center (a description of an existing program)

Maryville College Environmental Education Center
Townsend, TN 37882

A Teacher's Manual for the Cades Cove Environmental Study Area in Great Smoky Mountains National Park, 1969.

Massachusetts Audubon Society
Lincoln, MA 01773

Curriculum Overview for Developing Environmentally Literate Citizens, developed by Charles E. Roth for the Liberty Council of Schools in cooperation with the Massachusetts Audubon Society, revised 1974.

Zero in on Environmental Education (an educational materials catalog)

Menomonie Public Schools
Project M-E-E (Man-Environment-Education)
718 North Broadway
Menomonie, WI 54751

Teacher's Guide for Use of Environmental Education Supplemental Curriculum Materials, Grade Levels K-4, 1973.

Metropolitan Nashville-Davidson County Schools
Nashville, TN 37203

Outdoor Education Manual for the Nature Resource Center (teacher's manual for using the Davidson County schools' nature center).

Miami-Dade Junior College
11011 Southwest 104th Street
Miami, FL 33156

Man and Environment. Robert H. McCabe and R. F. Mines, eds. Published by Prentice-Hall, Inc., Englewood Cliffs, NJ 07632, 1972. ($4.95)

Michigan Department of Conservation
Lansing, MI 48926

Conservation Education and Elementary Grades–Teacher's Manual

Michigan Department of Natural Resources
Lansing, MI 48926

Environmental Education for Intermediate Grades–Teacher's Manual
Environmental Education for Junior High Grades–Teacher's Manual

Milwaukee Public Schools
Environmental Education Office
Room 265, Administration Building
5225 West Vliet Street
Post Office Drawer 10K
Milwaukee, WI 53201

Art/Environmental Aesthetics
The Elective Program in English/Writers and the Environments
Environmental Chemistry Activities
Environmental Education Activities/English Language Arts Program in the Junior and Senior High Schools
Environmental Education/Home Economics - Seventh Grade
Environmental Education/Mini-Proposal Handbook
Environmental Education/An Overview
Environmental Education Resource Materials Inventory
Junior High Mathematics Activities and Problems in Environmental Education
Senior High Mathematics Activities and Problems in Environmental Education

Minnesota Department of Natural Resources
Bureau of Information and Education
350 Centennial Building
St. Paul, MN 55101

Educational Lands Resource Assessment (designed to encourage the use of outdoor classrooms for environmental studies)

Environmental Ideas and Ideals Guide (a brochure containing many project ideas)

A Guide to Minnesota Environmental Study Areas

Learning to Live (a manual of environmental education activities)

Minnesota Environmental Sciences Foundation, Inc.
5400 Glenwood Avenue
Minneapolis, MN 55422

Teacher's guides available from:

National Wildlife Federation
Educational Servicing
1412 16th Street, NW.
Washington, DC 20036

Brine Shrimp (w/teacher's guide)
Button Bags (w/teacher's guide)
Change in a Small Ecosystem (teacher's guide)
Color and Change (w/teacher's guide)
Contour Mapping (w/teacher's guide)
Difference in Living Things (teacher's guide)
Dirty Air
Fish and Water Temperature (teacher's guide)
Genetic Variation (teacher's guide)
Habitat Study/Transect Study
Liquids and More Liquids
Man's Habitat–The City (w/teacher's guide)
Microclimate–Measuring Techniques
Minnows and Models
Nature's Art (w/teacher's guide)
Nature Hunt (w/teacher's guide)
Oaks, Acorns, Climate, and Squirrels (teacher's guide)
Outdoor Activities (w/teacher's guide)
Pesticides are Perilous
Photography For Kids
Plants in the Classroom (w/teacher's guide)
Plant Puzzles (w/teacher's guide)
Population Growth
Population Sampling
Population Variation
The Rise and Fall of a Yeast Community (teacher's guide)
Salts
Shadows (w/teacher's guide)
Snow and Ice (w/teacher's guide)
Soil Sampling (w/teacher's guide)
Sounds and Silence
Stream Profiles (w/teacher's guide)
Succession in a Micro-Aquarium
Tile Patterns and Graphs (teacher's guide)
Tragedy in the Laundromat
Transect Activities I (w/teacher's guide)
Transect Activities II

Minnesota Environmental Sciences Foundation, Inc. (continued)

Trash Is Taking Over
Tree Watching
Troublesome Tail Pipes
Tubs of Tiles
Vacant Lot Studies (w/teacher's guide)
Variation Within a Species
Wind (w/teacher's guide)

Montana State University
Department of Chemistry
Bozeman, MT 59715

Investigations in Atomic and Nuclear Science, by John R. Amend, 1969. Nuclear science module in a series of texts for high school level.

Mount Vernon School District No. 320
314 North Ninth
Mount Vernon, WA 98273

Scope and Sequence for Environmental Education, 1972.

Muir Woods–Point Reyes Natural History Association
Point Reyes National Seashore
Point Reyes, CA 94956

The Strands Walk, elementary outdoor study (produced in cooperation with the National Park Service's environmental education program)

Muscatine-Scott County School System
Handicapped Children's Nature Center
1523 South Fairmont
Davenport, IA 52802

Mini-Explorations of Our Environment (This teacher's guide contains a general overview, guidelines to study, and a list of resource materials.)

National Aeronautics and Space Administration
Educational Programs
Office of Public Affairs
Washington, DC 20546

Skylab Experiments, Vol. 3, Materials Science
Vol. 4, Life Science
Vol. 5, Astronomy and Space Physics
Vol. 6, Mechanics
Vol. 7, Living and Working in Space

National Audubon Society
1130 Fifth Avenue
New York, NY 10028

Manual of Outdoor Conservation Education, by Joseph J. Shomon, 1963. ($1.00)
A Nature Center for Your Community, by Joseph J. Shomon, 1963. ($1.00)
A Place to Live (A teacher's manual and classroom workbook for the elementary level are available.) 1970.
Planning a Nature Center, by Byron L. Ashbaugh, 1966. ($2.00)
Trail Planning and Layout, by Byron L. Ashbaugh and Raymond J. Kordish, 1971. ($3.00)
Wildlife Habitat Improvement, by Joseph J. Shomon, Byron L. Ashbaugh, and C. D. Tolman, 1966. ($2.50)

National Education Association
1201 Sixteenth Street, NW.
Washington, DC 20036

Energy Choices for Now: Saving, Using, Renewing, an introduction to energy in the environment, 1974. Book for students and a teacher's manual.

Man and His Environment (an introduction to using environmental study areas) ($1.75)

National Science Teachers Association
1201 Sixteenth Street, NW.
Washington, DC 20036

Several publications and environmental resources material packets are available including listings of free and low-cost environmental education materials.

National Tuberculosis and
Respiratory Disease Association
15 East Twenty-sixth Street
New York, NY 10010

Air Pollution Primer, 1971.

National Wildlife Federation
1214 Sixteenth Street, NW.
Washington, DC 20036

The Environmental Discovery Series (contains a number of teacher preparation guides to activities for grades K-12, prepared by Minnesota Environmental Sciences Foundation, Inc.; see MESF listing.)

New Hampshire State Department of Education
Division of Instruction
Concord, NH 03301

Environmental Education for New Hampshire Elementary and Secondary Schools, Curriculum Bulletin No. 1, March 1971.

New Jersey Education Association
180 West State Street
Trenton, NJ 08608

Energy Crisis: A Teacher's Resource Guide, 1974. Objectives, background content, activities, references, and examples of measuring devices for every classroom use.

New Mexico Department of Education
Santa Fe, NM 87501

Environmental Education Manual for New Mexico Teachers

New Mexico Water Resources Research Institute
New Mexico State University
Box 3167
Las Cruces, NM 88003

Problems of New Mexico and the Southwest–School Learning Materials on Water

New York State Education Department/
The University of the State of New York
Washington Avenue
New York, NY 12224

Environmental Education Instructional Activities–K-6, 7-12, 1972. (These two books offer an interdisciplinary problem-solving approach to environmental studies.)

An Environmental Experience, 1971.

New York State Education Department/
The University of the State of New York (continued)

The Environment and Society: Adult Basic Education--People and Cities, 1974. (instructor's manual, worksheets, and filmstrip manual)

Living Within Our Means: Energy and Scarcity, Environmental Education Instructional Activities, K-6.

Outdoor Education for Elementary Schools, 1970.

North Carolina Department of Public Instruction
Division of Science Education
Raleigh, NC 27611

Environmental Education (concepts, activities, and bibliography)
Environmental Education Instructional Units (separate units covering natural resources, population, and pollution)
Environmental Education Preservice Preparation for Teachers
Environmental Education Problems, Projects, and Exercises (4-10)
Environmental Education Strategies for Wise Use of Energy
A Guide to Environmental Education Resources
Teacher's Guide for Environmental Education

Nova Schools
Interdisciplinary Environmental Education Project
3600 College Avenue, SW.
Fort Lauderdale, FL 33314

Guidelines for Curriculum Development - Environmental Education K-12

Ohio Department of Education
Superintendent of Public Instruction
Columbus, OH 43215

Environmental Learning Experiences (three guides for grades K-2, 3-4, and 5-6), 1973, prepared by Center for the Development of Environmental Curriculum, Willoughby-Eastlake City Schools, Willoughby, OH 44094.
Environmental Learning Resources (an annotated catalog)

Open Lands Project
53 West Jackson Boulevard
Chicago, IL 60604

Environment Education and Your School Site, by Donn Paul Werling, 1973. ($3.00) Handbook for developing school sites for use in environmental education programs.

F. A. Owen Publishing Company
Dansville, NY 14437

Nature Study: Facts and Activities, by Marjorie Seymour, 1961 (revised 1967) Teacher's guide, grades 4-6.

Paducah Public Schools
Post Office Box 1137
Tenth & Clark Streets
Paducah, KY. 42001

Environmental Education, Objectives and Field Activities, 5th ed., 1974. ($7.00)

Pennsylvania Department of Education
Office of Information and Publications
Post Office Box 911
Harrisburg, PA 17126

Environmental Education Games
Environmental Education Instructional Activities (K-6)
The Environmental Impact of Electrical Power Generation: Nuclear and Fossil (a minicourse for secondary schools and adult education; both student and teacher guides are available.)
Environmental Issues and Problems (air)
Environmental Issues and Problems (water)
A Guidebook to Guidebooks (an urban environmental education resource book), by Richard Saul Wurman, Howard Brunner, and Nancy Donovan of Group for Environmental Education.
Guidelines for Environmental Sensitivity
Nuclear Science: A High School Course, 1971, (provides a basic but comprehensive understanding of the atom in the light of modern knowledge); and *Supplementary Materials for Nuclear Science*, 1971.
P. D. E. Environmental Film Series (suggests films and provides guidelines for their use)
Pennsylvania Teaching Guide to Natural Resources Conservation: Curriculum Services Series No. 7 (a guide to conservation activities)
School Site Development for Conservation and Outdoor Education

Pennsylvania Department of Health
Harrisburg, PA 17126

Air Pollution Experiments for the Science Classroom

Pennsylvania Region H Planning Staff
1308 Third Avenue
Post Office Box 87
Duncansville, PA 16635

Naturealm - A Classroom Teaching and Resource Guide in Conservation Education, by William M. Barnhart, 1968.

Philadelphia School District
Curriculum Planning and Development
Twenty-first and Parkway
Philadelphia, PA 19131

Human Ecology: An Issue-Centered, Interdisciplinary Curriculum, 1973.

Plover Books
Terrace Heights
Winona, MN 55987

Teaching Guide for the Plover Books, by Rodney F. Allen, 1974.

The Population Reference Bureau, Inc.
1755 Massachusetts Avenue, NW.
Washington, DC 20036

Options (a study guide to population and the American future), 1973.

Poudre R-1 School District
2407 LaPorte Avenue
Fort Collins, CO 80521

Environmental Education Project Activity Book (grades K-12)

Project I-C-E (Instruction-Curriculum-Environment)
1927 Main Street
Green Bay, WI 54301

A series of environmental education guides is available for these areas:

Agriculture, 9-12 (1 book)
Art, 4-6 (1 book)
Business Education, 9-12 (1 book)
Fine Arts, K-6, 7-9, 10-12 (3 booklets)
Health and Physical Education, K-6, 7-9, 10-12 (3 booklets)
Home Economics, 7-12 (1 book)
Industrial Arts, 7-12 (1 book)
Language Arts, K-12 (13 booklets)
Mathematics, K-12 (13 booklets)
Science, K-12 (13 booklets)
Social Science, K-12 (13 booklets)

Purdue University
Natural Resource and Environmental
Science Program
Entomology Hall
Lafayette, IN 47905

Environmental Education for the Seventies

Rodale Press, Inc.
Educational Services Division
Emmanus, PA 18049

Recycling (an interdisciplinary approach to environmental education), by Thomas Fegely, Rita Reemer, and Lynn Miller Rinehart, 1973.
Teaching Science with Garbage, by Albert Schatz and Vivian Schatz, 1971.
Teaching Science with Soil, by Albert Schatz, 1972.

Interdisciplinary teaching aids and other environmental education materials are available for grades K-9. A brochure describing these materials is available free of charge.

St. Bethlehem School
Route 8
Clarksville, TN 37040

That Which Can Best Be Taught Outdoors (an outdoor education guide for grades 1-6)

St. Martin Parish School Board
Environmental Program
Post Office Box 230
St. Martinville, LA 70582

Environmental Education Curriculum Development for Grade 6
Environmental Education Curriculum Development for Grade 8 (contains units on ecology, earth materials, air, water, wildlife, solid waste, pesticides, etc.)

St. Vrain Valley Public Schools
395 South Pratt Parkway
Longmont, CO 80501

Environmental Discovery School, student manual.

Santa Barbara School Districts
Career Education Projects
309 Princeton Avenue
Santa Barbara, CA 93111

Energy and Careers for Tomorrow, by Len Mooy and Don Stillman, 1974. (Career Education Concept Series, elementary grade level) ($1.00)

Santee School District
Post Office Box 220
Santee, CA 92071

Environmental Education . . . A Teacher's Guide with Inquiry and Value Seeking Strategies, by Julianna M. Hamann, 1973.

Saskatchewan Natural History Society
Box 1121
Regina, Saskatchewan
Canada

How To Conduct a Nature Study Group, by Joyce Deutscher, 1964.

P. A. Schiller and Associates
Post Office Box 307
Chicago, IL 60690

Inexpensive Environmental Teaching Units (contains descriptions of the 54 environmental education investigations for elementary students which are available)

Scientists' Institute for Public Information
30 East Sixty-eighth Street
New York, NY 10021

Environmental Cost of Electric Power, Environmental Workbook in SIPI series, by Dean E. Abrahamson.

Environmental Education: 1970, by Everett M. Hafner, John M. Fowler, and Curtis A. Williams. (Workbook for undergraduate studies in environmental science) ($1.00)

Seattle City Light Company
City Light Building
1015 Third Avenue
Seattle, WA 98104

Power Generation Alternatives, 1972. ($5.00)

Shawnee Mission Public Schools
Project CLEAN
7235 Antioch
Shawnee Mission, KS 66204

Curriculum Catalog/Cooperative Learning through Environmental Activities in Nature 1971-1973 (contains descriptions of the 123 modules available which cover grades K-12 and Special Education in all curriculum areas)

Sierra Club
San Francisco Bay Chapter
1050 Mills Tower
220 Bush Street
San Francisco, CA 94104

How To Teach Wilderness Conservation, Thelma Carder, ed., 1968.

Silver Burdett Company
Morristown, NJ 07960

Adventures in Environment (a series which contains a classroom book, outdoor book, and teacher's guide).

Simon Lake School
Milford, CT 06460

Pollution - A Teaching, three activity units for middle and upper grades.

The Society for Environmental Stabilization
Post Office Box 252
Fayetteville, AR 72701

This Is The World We Live In, (felt-board program–children's environmental education)

Soil Conservation Society of America
7515 Northeast Ankeny Road
Ankeny, IA 50021

Environmental Quality and the Citizen (a teaching guide for adult education courses related to the environment) ($2.00) By Bernard L. Clausen and Ross L. Iverson.

Planning and Organizing an Adult Environmental Education Program. ($2.00)

Southeastern Pennsylvania Outdoor Education Center
Sycamore Mills Road
Media, PA 19063

Series of outdoor activities.

Southern Connecticut State College
New Haven, CT 06515

Scientific Experiments in Environmental Pollution, 1968.

Springfield Public Schools
Environmental Center for Our Schools
195 State Street
Springfield, MA 01103

Environmental Center for Our Schools (ECOS) Curriculum Guide (a curriculum activities guide of nature and environmental studies for grades 4, 5, and 6).

Stepping Stone Environmental Education Center
Route 2, Box 270
Branchville, NJ 07826

Teacher's Guide for Resident Outdoor Education Programs, prepared by Joyce A. Gaus.

Tennessee Valley Authority
Division of Power Production
Chattanooga, TN 37401

Nuclear Power, Introduction to, 1970, text of background and basic material in the areas of nuclear reactor theory and operation.

Tennessee Valley Authority
Information Office
333 New Sprankle Building
Knoxville, TN 37902

Use That Campus, prepared by Division of Forestry, Fisheries, and Wildlife Development.

Topeka Public Schools
Environmental Education Project
1601 Van Buren
Topeka, KS 66612

Camping Skills
Energy
Energy and You
Enjoying the Environment
Environmental Fundamentals
Forests and Man
Insects and Spiders
Nutrition and the Growing Population
Tire Production and Pollution Control
Water Pollution
The Winter Environment

(These curriculum guides cover grade levels ranging from elementary to secondary and a variety of curriculum areas.)

Union Township Public Schools
Pollution Control Education Center
2369 Morris Avenue
Union, NJ 07083

Priority One - Environment/A Pollution Program for Grades 1-9 (Describes the program and contains information on air pollution, solid waste management, marine and seashore pollution, water pollution, thermal water pollution, etc.)

U.S. Department of Agriculture
Washington, DC 20250

Environmental Thrust Handbook, 1971.

U.S. Department of Agriculture
Agricultural Marketing Service
Washington, DC 20250

How To Buy Food - Lesson Aids for Teachers, Handbook No. 443, 1973.
Available from: Superintendent of Documents
U.S. Government Printing Office
Washington, DC 20402
Stock No. 0-513-973(32)
Price: $0.80

U.S. Department of Agriculture
Agricultural Research Service
Information Division
Washington, DC 20250

Science Study Aids (packet of educational materials involving nearly all scientific disciplines)

U.S. Department of Agriculture
Forest Service
Post Office Box 3623
Portland, OR 97208

Conservation Tools for Educators - Putting Conservation to Work, 1970.
Investigating Your Environment
Outdoor School Songs
Preparing For Public Involvement

U.S. Department of Agriculture
Forest Service
Washington, DC 20250

Teaching Conservation through Outdoor Education Areas, July 1968 (PA-837)
Teaching Materials for Environmental Education–Investigating Your Environment, July 1973.
For sale by: Superintendent of Documents
U.S. Government Printing Office
Washington, DC 20402
Stock No. 0101-0234
Price: $0.95

U.S. Department of Agriculture
Soil Conservation Service
2020 Milvia Street
Berkeley, CA 94704

The Community School Site: A Laboratory for Learning, March 1970.

U.S. Department of Agriculture
Soil Conservation Service
Washington, DC 20250

Outdoor Classrooms on School Sites (PA-975)
An Outline for Teaching Conservation in Elementary Schools (PA-268)
An Outline for Teaching Conservation in High Schools (PA-201)
Soil and Water Conservation Activities - A Guide for Leaders of Girl Scouts (PA-664)
Teaching Soil and Water Conservation - A Classroom and Field Guide (PA-341)

U.S. Department of Health, Education, and Welfare
Office of Education
Division of Technology and Environmental Education
400 Maryland Avenue, SW.
Washington, DC 20262

Aids to Environmental Education (preschool-grade 3)
Aids to Environmental Education (grades 4-6)
Aids to Environmental Education (grades 7-9)
Aids to Environmental Education (grades 10-14)
(Listings of environmental education materials compiled by Hatheway School of Conservation of the Massachusetts Audubon Society, Lincoln, MA 01773)
Understanding Environmental Education (a collection of readings in environmental awareness)

U.S. Department of the Interior
Washington, DC 20402

Miniature Environments - An Environmental Education Guidebook

U.S. Department of the Interior
Bureau of Land Management
Washington, DC 20240

All Around You: An Environmental Study Guide (Includes aids for the teacher and worksheets for the student.)

Learning About the Environment

U.S. Department of the Interior
Bureau of Reclamation
Washington, DC 20402

Environmental Guidebook for Construction, 1974.
Available from: Bureau of Reclamation
Engineering and Research Center
Attn: Code 922, Denver Federal Center
Denver, CO 80225
and
Superintendent of Documents
U.S. Government Printing Office
Washington, DC 20402
Stock No. 2403-00090
Price: $1.00

U.S. Department of the Interior
National Park Service
Stones River National Battlefield
Murfreesboro, TN 37130

Stones River National Battlefield–Artillery Monument Environmental Study Area–Teacher's Manual

U.S. Department of the Interior
National Park Service
Washington, DC 20242

Environmental Education on an Urban School Site, A Guide for Teachers, compiled by Roy Graybill and Sandra Walter.
The Green Scene: A Home Gardener's Handbook, 1973.
National Environmental Study Area: A Guide
NEED materials include a teacher's guide, student classroom materials, and a student log book for environmental studies.

U.S. Environmental Protection Agency
Office of Public Affairs
Washington, DC 20460

A Curriculum Activities Guide to Water Pollution and Environmental Studies, Volumes I and II, 1972.
Environmental Exchange: A Beginning (President's Environmental Merit Awards Program)
Fun With the Environment (a fun-as-you-learn book for kids who care about the environment)
The Processing and Recovery of Jon Thomas–Cool Cat! (Solid Waste Management Series)
Solid Waste Management - Recycling and the Consumer
There Lived a Wicked Dragon (an environmental coloring book with solid waste management as the theme)
Training, Upgrading, Reinforcing - Water Pollution Control Workers (reprint from Department of Labor handbook)
Your World, My World

University of Minnesota
Agricultural Extension Service
St. Paul, MN 55101

Wildlife Habitat Improvement Guide for Minnesota Youth, 4-H Bulletin 4, 1973, and packet of environmental education guides.

University of Pittsburgh
Department of Physics
Pittsburgh, PA 15260

Energy: A Technological, Economic, or Moral Crisis? By John H. Anderson, 1974.

The University of Tennessee
Environment Center
346 South Stadium Hall
Knoxville, TN 37916

Environmental Problems - How Should They be Dealt With and By Whom? (some thoughts which may be helpful for teaching in elementary schools) Also, a variety of other materials on a wide range of environmental concerns is available.

University of Wisconsin
School of Natural Resources
Center for Environmental Communications
and Education Studies
433 North Murray Street
Madison, WI 53706

A Bibliography of Key Environmental Resources
Environmental Education - Related Research 1969-72 (an annotated bibliography)
Teaching Materials and References in Environmental Education

University of Wisconsin - Green Bay
Environmental Studies Project
Green Bay, WI 54302

The Wisconsin Fox River Valley Watershed: Environmental Studies Project–
Unit I, Watershed Overview
Unit II, Maps, Regions, and Resources
Unit III, Looking More Closely: Ecology and the Watershed
Unit IV, The Watershed: A Time Perspective

Upper Mississippi River Eco-Center
Thomson, IL 61285

Environmental Education Curriculum Guide for K-8
Environmental Education: An Interdisciplinary Approach for the Intermediate Level–Fifth Grade

Valley Center Union School District
28751 Cole Grade Road
Valley Center, CA 92082

Valley Center Union School District's Nature Study Center, Teacher's Handbook and Field Guide, 1972. Prepared by: W. R. Reed, Project Coordinator

Valley Center Union School District (continued)

Sponsored by: Department of Education (San Diego County)
Center for Environmental Education
6401 Linda Vista Road
San Diego, CA 92111

Virginia State Department of Education
Divisions of Elementary and Secondary Education
Richmond, VA 23216

An Activity Centered Program for Environmental Education (K-12), 1974.

Warwick School Department
1849 Warwick Avenue
Warwick, RI 02889

Marine and Environmental Studies Program (a guide containing objectives and activities for use in studying the marine environment), 1973.

Washington Superintendent of Public Instruction
Old Capitol Building
Olympia, WA 98504

Create Tomorrow . . . Today, March 1974. Guidelines and instructional tools for use by teachers and administrators (elementary and secondary levels). This document was developed as part of the Energy Awareness Program, Washington State.

Webster Groves School District
Webster Groves, MO 63119

Aids for Nature Interpretation (activities for a scheduled nature activity session), 1967.

Yadkin Valley Economic Development District, Inc.
Stokes County Community Action Program
Post Office Box 417
Walnut Cove, NC 27052

Teacher's Guide–Ecology–Grade 4, 1972.
Teacher's Guide–Ecology–Grade 7, 1972.

The Model Environmental Education Program

A model environmental education program is one which helps the individual become (1) aware of the environment and its associated problems; (2) concerned, knowledgeable, and accurately informed about the problems; (3) knowledgeable and informed about the possible future consequences of the problems; (4) engaged in clarifying values and making decisions based on attitudes and beliefs; (5) involved in finding the solutions to environmental problems–alternatives, tradeoffs, compromises, and costs; and (6) committed to and involved in some type of constructive action which enhances environmental quality.

–Jonathan M. Wert, Ph.D.